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THE POTENTIAL FOR VANPOOLING IN MANITOBA

MG-12913

23 (80-8)
MAY 1984

MANITOBA/CANADA CONSERVATION AND RENEWABLE ENERGY DEMONSTRATION AGREEMENT

The availability of secure and affordable energy supplies is a subject of national concern. It is an accepted fact that our primary energy sources - oil and natural gas - are becoming less accessible and more costly. However, Canada is well-endowed with non-renewable and alternative resources that can provide a bridge into the future.

To this end, the governments of Manitoba and Canada have entered into a Conservation and Renewable Energy Demonstration Agreement which was signed May 9, 1980 and terminates March 31, 1984. The Agreement is dedicated to the development and demonstration of conservation and renewable energy technologies. Equally cost-shared by the provincial and federal governments, the program has a total budget of $18-million.

The objectives of CREDA are:

- To develop and demonstrate promising new technologies, which, when widely adopted, will exploit renewable resources, conserve energy and/or use energy more efficiently.
- To develop broad public awareness of the potential of renewable energy and conservation technology.
- To provide opportunities for the commercial application of the technologies within Manitoba.
- To create economic spin-off benefits for manufacturing, industry and commerce.
- To create employment in new or existing energy-related industries.

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TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	
1. Introduction	1
2. Project Objectives	2
3. Approach and Results	4
3.1 Concept Promotion	4
3.2 Education	5
3.3 Site-Specific Technical Evaluation	8
3.4 Vanpool Implementation	15
4. Project Results	16
5. Ecomomic Benefits and Future Potential	19
6. Commercial Potential	25
7. Legal Aspects	25
8. Conclusions and Recommendations	27
BIBLIOGRAPHY	29
APPENDICES:	
A. Questionnaires Used to Solicit Employer and Commuter Interest	30
B. List of Firms Contacted to Participate in Educational Sessions	31
C. List of Firms Participating in Educational Sessions	34

EXECUTIVE SUMMARY

This document is the final report on the vanpooling demonstration project funded under the Manitoba/Canada Conservation and Renewable Energy Demonstration Agreement CREDA and sponsored by the Manitoba Department of Highways and Transportation in cooperation with the Manitoba Department of Energy and Mines. CREDA contributed $30,000 to the project.

The project was undertaken over the period of late 1982 and early 1983, with the aim of clearly showing the energy conservation advantages of vanpooling and thereby attempting to gain widespread adoption of the concept. Basic steps in the project included concept promotion, education, site-specific technical evaluation, vanpooling implementation and program evaluation.

Following the distribution of promotional information to potentially interested major Manitoba employers, four formal education seminars were held - three in Winnipeg and one in Brandon. Positive reaction to the vanpooling concept was received from representatives of a number of organizations in attendance, and on-site technical evaluations (or, feasibility studies) were undertaken for five of these. Those organizations which declined to have feasibility analyses undertaken generally did so because of their concerns relating to the stability of employment levels in the prevailing recessionary climate. Vanpooling was not considered to be feasible for the five organizations for which technical

evaluations were conducted, primarily because of insufficient residence clustering of long-distance commuting employees within individual firms.

Even though it was not possible to implement any vanpools within the scope of the demonstration project, the project yielded important benefits. An appreciable number of major Manitoba employers, executives and commuters are now familiar with vanpooling concepts. The interest of these people, combined with efforts made in the course of the project to facilitate vanpool implementation, should yield affirmative vanpool formation opportunities when current economic circumstances improve. In particular, the vanpooling alternative will likely be of interest to new or growing organizations employing more than a thousand persons at a given location, on a given shift.

Measures should be taken to ensure that future energy-conservation opportunities through vanpooling are captured. These include legislative amendments, the demonstration of "third party vanpool" concepts, commuter-oriented marketing efforts and the commitment of ongoing resources to inform and assist potential future vanpoolers and vanpool sponsors.

RÉSUMÉ ADMINISTRATIF

Ce document constitue le rapport final du projet de covoiturage financé en vertu de l'Entente Canada-Manitoba de démonstration des énergies renouvelables et des économies d'énergie (DEREE) et parrainé par le ministère de la Voirie et du Transport du Manitoba en collaboration avec le ministère de l'Énergie et des Mines de ladite province. Ce projet a reçu 30 000 $ du programme DEREE.

Le projet a été réalisé de la fin de l'année 1982 au début de l'année 1983 afin de faire ressortir clairement les économies d'énergie qu'il était possible de faire grâce au covoiturage et, de ce fait, populariser l'idée de covoiturage. La diffusion du concept, l'éducation du public, l'évaluation technique d'une application précise, la mise en oeuvre du projet et l'évaluation du programme constituaient toutes des étapes fondamentales du projet.

Après la distribution de la documentation aux gros employeurs du Manitoba susceptibles d'être intéressés, on organisa quatre colloques d'information - trois à Winnipeg et un à Brandon. Les représentants d'organismes qui assistèrent à ces colloques réagirent de façon positive au concept de covoiturage. Cinq de ces entreprises demandèrent des évaluations techniques (études de faisabilité). Les organismes qui refusèrent que l'on fasse une étude de faisabilité invoquèrent en général la question de la stabilité d'emploi dans un climat dominé par la récession. Quant aux cinq organismes pour qui on a fait une évaluation technique, on estima que le covoiturage ne leur convenait pas en raison du manque de concentration des résidences de leurs employés devant se déplacer de loin pour venir travailler.

Bien qu'il n'a pas été possible de mettre en oeuvre un projet de covoiturage dans le cadre du programme de démonstration, il n'en est pas moins ressorti des avantages importants. Il y a maintenant au Manitoba, un nombre appréciable de gros employeurs, de cadres, et de travailleurs demeurant loin de leur entreprise qui connaissent le concept de covoiturage. L'intérêt témoigné par ces personnes et les efforts déployés pour faciliter la mise en oeuvre d'un projet de convoiturage devraient porter des fruits lorsque les conditions économiques actuelles s'amélioreront. Le covoiturage intéressera tout particulièrement les entreprises nouvelles ou en voie d'expansion qui emploient plus de mille personnes par équipe à un endroit donné.

Des mesures devraient être prises afin de s'assurer que l'on saisisse toutes les possibilités d'économiser l'énergie grâce au covoiturage. Parmi ces mesures, citons les modifications aux lois existantes, la démonstration du concept de "covoiturage par des tiers", les efforts de marketing orientés vers les travailleurs qui se déplacent de loin pour se rendre au travail et l'engagement de ressources pour informer et aider les futurs usagers du covoiturage.

1. INTRODUCTION

The high cost of automotive fuels and concern about their continued availability underline the need for increasing the energy efficiency of journey-to-work transportation through a variety of alternatives including ridesharing.

A number of ridesharing programs have been established in the United States including vanpooling, carpool matching, buspooling, transit information and fringe parking facilities. In Canada the awareness of the potential for ridesharing has been growing and some individual projects have been carried out, such as the establishment of employer-sponsored vanpooling programs at large industrial firms. Simply defined, vanpooling is an innovative journey-to-work transportation alternative in which a number of commuters share the cost of travel in a single van, thus reducing the number of private automobiles on the road. Vanpooling has gained recognition as a means of conserving energy and provides a number of benefits to employers, employees and the general public.

Despite vanpooling's established potential for achieving considerable savings in motor fuel consumption, the idea has met with mixed success and has been slow to catch on. This is due, in part, to a lack of information, organization and

technical advice or encouragement for vanpool sponsors and/or vanpoolers in getting started. Given these circumstances, the Manitoba Department of Highways and Transportation in cooperation with the Manitoba Department of Energy and Mines sponsored this demonstration project under CREDA to clearly show the inherent advantages of vanpooling and to promote widespread adoption of the concept. The services of a Winnipeg-based transportation consulting firm - E.M. Ludwick & Associates Inc. - were retained for the purpose of executing the demontration project.

2. PROJECT OBJECTIVES

The demonstration project was structured along the lines of several distinct phases: concept promotion, education, and the selection and implementation of specific vanpooling projects, followed by a program evaluation as reported in this document. In particular, the project was designed to meet the following objectives:

1.) To develop broad public awareness in Manitoba of the energy saving potential of vanpooling thereby demonstrating a concept which, if widely adopted, would conserve energy and make it's use more efficient;

2.) To develop increased public awareness in specific groups by providing interested parties with greater in-depth knowledge of vanpooling through educational seminars;

3.) To provide specific technical assistance in selected cases, in order to identify affirmative vanpooling opportunities and to quantify benefits/savings that could be achieved by potential participants;

4.) To publicly demonstrate the advantages of vanpooling by implementation of a demonstration program in which assistance could be provided in organizing routes, establishing fare calculation and review procedures, and fare collection and record keeping systems;

5.) To provide a basis for follow-up action within the framework of an ongoing transportation energy management program, and;

6.) To provide an evaluation of the strengths and weaknesses of the vanpooling demonstration program and the extent of its contribution to meeting energy conservation goals.

The technology to be demonstrated was that properly motivated groups provided with proper descriptive materials, comprehensive briefings and organizational assistance can operate self-supporting vanpools that make a significant

contribution to energy conservation as well as reduced traffic congestion and parking requirements.

3. APPROACH AND RESULTS

The demonstration project was conducted from September, 1982 through to March, 1983 along the lines of the following five phases:

Phase 1 - Concept Promotion

Phase 2 - Education

Phase 3 - Site Specific Technical Evaluation

Phase 4 - Vanpooling Implementation

Phase 5 - Program Evaluation

3.1 Concept Promotion

Promotional material was prepared for distribution to organizations employing over 200 persons with regular hours of work and thought to be potentially interested in the vanpooling alternative. Research was conducted to identify prospective participants in the demonstration project. In total, specific management/administrative executives in 91 organizations (38 in Winnipeg and 53 in rural Manitoba) were identified (See Appendix B).

The promotional material distributed to the employers included a covering letter from the Manitoba Minister of Highways and Transportation. Through this initial mailing, prospective program participants were provided with a general understanding of the vanpooling concept, its energy

conservation potential and its widespread applicability under a variety of conditions.

3.2 Education

Following the dissemination of promotional information, a telephone survey (questionnaire included in Appendix A) of over 90 major Manitoba employers was conducted to determine these organizations' preliminary views on the vanpooling concept and to ascertain their interest in attending education seminars. Of the employers contacted, 23 expressed an interest in vanpooling and in attending education seminars. A further 15 organizations advised that current circumstances did not permit them to attend seminars but advised the consultants of their potential future interest in vanpooling and their desire to receive further information.

The remaining 53 employers did not consider vanpooling to be a concept meriting their involved attention or detailed investigation for a variety of reasons including:

- pending layoffs (or, in some cases, plant closures) precluded the introduction of this type of program;
- too much shift work and/or overtime;
- not enough employees commuting long distances;
- employees already involved in carpooling

Based on responses to the survey - convenient seminar dates were selected and communicated to interested employers.

Attendance commitments from prospective participants were obtained by contacting the organizations as frequently as necessary.

Formal vanpooling seminars were held in Winnipeg on October 28, November 3, and November 24 and in Brandon on November 26. (See Appendix C for list of participants.) Topics covered included the following:

- benefits of vanpooling
- legal conditions and insurance requirements
- vanpool formation and driver selection
- route identification
- fare calculation and cost control
- equipment selection and financial arrangements
- maintenance and administration
- other important matters arising from seminar participants' questions

At each presentation, either or both of two major films on vanpooling ("Vanpooling" produced by the National Film Board and "Pooling Around" produced by Continental Oil Company) were shown and discussed. Twenty-seven individuals representing 19 major Manitoba employers attended the four seminars (Names of organizations represented at educational sessions are provided in Appendix C). In addition, private presentations were also given to three organizations for whom feasibility studies were later carried out. Several sessions were held with two groups of individuals interested in

forming a "commuter-initiated" vanpool, and a special presentation on vanpooling was made to the members of a prominent service club. (This presentation was attended by more than 40 individuals, a number of whom hold management positions with major employers.) Finally, promotional and educational information (including The Canadian Vanpooling Guidebook) were forwarded to employers who expressed a serious interest in vanpooling but were unable to attend seminars.

Later in the course of the demonstration it was determined that a special approach for the promotion of vanpooling in selected major urban centres outside of Winnipeg should be taken because of the relatively smaller size of employers. This approach involved the premise that several smaller employers located within relatively close proximity of one another could combine forces to jointly sponsor and promote vanpooling amongst their long distance commuting employees even though no single employer was large enough to sponsor its own program. Some 67 smaller employers (between 25 and 100 employees) in Brandon, Portage La Prairie, Steinbach, and Selkirk were contacted and given an explanation of vanpooling and the demonstration project. Twenty-five of those organizations expressed an interest in promoting joint or cooperative vanpooling amongst their employees.

3.3 Site-specific Technical Evaluation

The consultant followed up with all organizations represented at the seminars in order to determine whether the potential for vanpooling was such that detailed feasibility studies should be conducted to determine employee interest. On the basis of information and techniques discussed at the education seminars and internal investigations of employee residences and commuting patterns, a number of firms determined that vanpooling would not be feasible at this time and, therefore, no study would be required.

Reasons for seminar participants' decisions to not pursue the vanpooling concept further included the following:

- uncertainty about business climate and possible negative effects on employment
- excessive variation in hours of work
- commuting distances not long enough
- employee residences too scattered (insufficient clustering)
- availability of adequate public transit services
- expected inability to replace current employee transportation subsidies with a vanpooling program
- fear of unions demanding the inclusion of vanpooling or passenger transportation subsidies in contracts
- perceived administrative requirements would be more than some firms would be willing to provide

Pursuant to the information they received at the seminars or in special presentations, several organizations decided to pursue the vanpooling concept further by having a feasibility study done. These were:

a) Selkirk Mental Health Centre (Selkirk)

b) Manitoba Telephone System (Winnipeg and Selkirk)

c) Transport Canada-Central Air Transport Administration (downtown Winnipeg and Winnipeg International Airport)

d) Burroughs Inc. (Winnipeg)

e) Stonewall Commuter Co-op Inc. (Stonewall)

The technical work undertaken by the consultant for each of the above organizations included a review of information such as location of employee residences, commuting distances, current journey-to-work patterns, stability of employment, incidence of shift rotation and/or overtime, and other factors pertinent to the formation of successful stable vanpools. The residence locations of employees working regular hours and living more than 15 kilometers from work were determined from personnel files or by employee survey (see Appendix A). This data was examined for significant clustering and potential route formation. The circumstances of the organizations studied and the results of the on-site technical evaluations are described briefly.

A) Selkirk Mental Health Centre (SMHC) - SMHC is a major institution in Selkirk, Manitoba, a town located approximately 40 kilometers north of Winnipeg. The organization employs approximately 400 people of whom over 150 commute between Selkirk and Winnipeg or other communities outside of Selkirk. However, of the 156 long-distance Commuters employed by SMHC at the time of the study, 102 were shift workers who rotate hours and days of work and starting times on a basis far too irregular to allow those employees to participate in a vanpooling program. An examination of the addresses of the remaining 54 commuters showed that sufficient clustering of employee residences was not evident.

Although the feasibility study found that an employer-sponsored vanpooling program operated solely by SMHC would not be likely to succeed, it is possible (and management supports the concept) that the joint or co-operative sponsorship of vanpools by several employers in the area would be feasible.

B) Manitoba Telephone System (MTS) - Following a special presentation on vanpooling to the MTS Department Managers Committee, approval was given to undertake a study of the feasibility of an MTS-sponsored vanpool program. Management considered that because employee residence information was not kept sufficiently up-to-date, the determina-

tion of the feasibility of a broad MTS vanpooling program would best be achieved by beginning with an attempt to implement a "pilot" vanpool project for a specific segment of MTS employees. At that point in time, MTS's Eastern Region employees working in Selkirk were facing a special need. A year previous, as part of a decentralization program, a number of Winnipeg-resident MTS employees been relocated to a new office in Selkirk. The organization's expectation was that employees would eventually relocate their residences to Selkirk. A transportation subsidy for commuting to Selkirk was granted up until such time as they moved for a maximum of one year. However, by the time of the expiry of the subsidies, most employees were still commuting from Winnipeg. It was therefore determined that a vanpooling pilot project for these employees would be appropriate.

A survey of potential vanpoolers commuting to work in Selkirk from residences in Winnipeg was undertaken (A standardized version of the questionnaire used is included in Appendix A). To enhance the likelihood of success of the pilot, Manitoba Hydro's small Selkirk office was also invited to take part in the feasibility evaluation. Of 46 prospective vanpoolers, 37 responded positively to a survey soliciting their views on and interests in vanpooling. An examination of residence clustering indicated the feasibility of one potential

vanpool route group. The possibility of combining several smaller clusters of employees was also apparent. In consideration of this information and data on hours of work and current journey-to-work transportation methods, it was recommended that MTS consider implementing a pilot vanpool program for its Selkirk employees.

On that basis MTS developed pertinent policies relative to its involvement in sponsoring vanpooling and a vanpool formation meeting was held. At the well-attended meeting, potential routes, driver and passenger subscription commitments, and fare structures were explained. Several of the prospective vanpoolers who appeared fully aware of their costs of commuting to and from Selkirk in their own private automobiles were quite enthusiastic about the vanpooling concept. Unfortunately, the majority of commuters felt that fare levels were too high and seemed to expect that MTS should subsidize vanpooling operations in the same way as they had been providing a monthly transportation allowance during the relocation period. As a result, these employees did not wish to participate in vanpools that would not be perpetually subsidized.

The reluctance of these employees to join a vanpool was further reinforced by the employer's decision to extend the relocation assistance period (by six months) and the transportation subsidy period (by four and a half

months). MTS management in Selkirk feels that commuting employees may reconsider the vanpooling option when the transportation subsidy is removed in mid-April, 1983. If so, it may be possible that the MTS Selkirk pilot pool could serve to demonstrate the benefits of vanpooling to MTS employees commuting long distances to other MTS locations.

C) Transport Canada-Central Region Air Administration (CRAA) - Vanpooling presentations were made first to CRAA's senior management committee and then to a committee of senior superintendants participating on a special internal energy conservation committee. Approval was given to conduct a survey of all CRAA's Manitoba employees with a view to determining the feasibility of a vanpooling program.

Questionnaires (See Appendix A) were sent to over 900 employees of which 395 were employed at Winnipeg International Airport, 400 were employed at CRAA's offices in downtown Winnipeg, and the remainder were based in several smaller centres in various Manitoba locations. No responses were received from this latter group.

Of the 400 CRAA employees working at Winnipeg International Airport, 109 responded. Of the 54 expressing a positive interest, 33 were considered to be prospective

vanpooling candidates due to the regularity of their hours of work and their current journey-to-work methods. Examination of these employees' residence locations failed to indicate sufficient clustering for successful vanpool formation.

Of the 395 CRAA employees working in the downtown Winnipeg location, 72 responded. Fifty-seven of these responded positively and worked regular hours. However, half of them were currently well served by existing public transit-leaving only 28 considered to be eligible to participate in a vanpooling program. Again, an examination of these employees' addresses did not indicate sufficient residence clustering for vanpool formation.

D) Burroughs Inc. - Burroughs Inc. is a manufacturer of high technology equipment located on the eastern outskirts of Winnipeg. Following a special presentation to the firm's personnel/administration staff, a feasibility study based on a specially updated computer printout of employee addresses and postal codes was undertaken.

The analysis revealed that 62 employees lived far enough away from Burroughs to be considered as prospective vanpoolers with significant clustering in the northwest and west sections of Winnipeg. Further investigation of the work patterns of the employees in the group

with the highest apparent potential showed over half of them to be involved in shift work rendering the size of the remaining group too small to form a successful vanpool.

E) Stonewall Commuter Co-op Inc. - Following the discontinuation of an uneconomic commuter bus service between Stonewall, Manitoba and Winnipeg, a group of commuters who were not linked by a common employer but had a common residence origin, approached the Manitoba Department of Highways and Transportation, and subsequently the consultant, for assistance in implementing a "commuter-initiated" as opposed to "employer-sponsored" vanpool. Presentations to these prospective vanpoolers were given in Winnipeg and Stonewall. Much legal and administrative research was undertaken to assist these individuals in limiting the risk to any individual within the group relating to ownership costs or lease dissolution penalties.

Negotiations were conducted with prospective providers of third party vanpool services. Discussions were held and arrangements made with regard to the legal incorporation of vanpool cooperatives. One of the major van manufacturers even offered the free use of a van to this group for a three to six month trial period. Despite exhausting efforts on the part of many, in the final

analysis, the Stonewall Commuter Co-op never materialized due to the core group's inability to obtain firm participation commitments from more than six commuters.

3.4 Vanpooling Implementation

For the various reasons mentioned in Section 3.3, it was not possible to implement any vanpools within the context or time frame of this demonstration project.

4. PROJECT RESULTS

In general the Manitoba vanpooling demonstration program's orientation toward employer-sponsored vanpooling projects did not yield the results which were expected when the demonstration program was originally designed. Experience here and elsewhere in North America indicates that the poor economic climate, as characterized by widespread employee lay-offs and temporary or permanent plant shutdowns combined with a general desire by employers to avoid risks (of any size), has been the principal cause of employers' reluctance to pursue vanpooling seriously. Further, faced with uncertain employment prospects, commuting employees have been even more reluctant to commit themselves individually or jointly to the high costs of vehicle acquisition.

Nevertheless, some lessons were learned which could be useful to other provincial jurisdictions considering the

promotion of vanpooling as an energy-efficient journey-to-work alternative:

a) It would appear that for suitable clustering of long-distance commuters to be evident in employer-sponsored vanpool programs, labour forces of at least 1,000 employees on a single standard shift are required.

b) In difficult economic times, private sector employers (of any size) are not likely to be interested in promoting vanpooling amongst employees for fear of pending layoffs which would negatively affect the stability of pools. Rather, in periods of economic recession, employers most likely to be in a position to offer stable employment prospects and therefore sponsor stable vanpools are federal, provincial, and municipal government departments, institutions and crown corporations.

c) When employers decentralize work locations or take other actions which result in employees having to commute long distances to their place of work, if the vanpooling or other ridesharing alternatives (including public transportation) are not initially made available, it may become difficult to divert commuters away from their private automobiles later on.

d) High gasoline prices alone are a necessary but not sufficient condition to induce individuals to share the ride. In times of very high interest rates, vehicle financing (lease or buy) costs may deter otherwise interested participants.

Even though the demonstration project was undertaken under unfavourable conditions - that is, a period of economic uncertainty and high unemployment - substantial progress was made in promoting the vanpooling concept to a large number of Manitobans who had heretofore been unaware of it. Promotion and education was conducted in the following levels:

- More than 160 Manitoba employers received at least minimal education in the vanpooling concept in the form of brochures and telephone contact.
- Over 60 employers were interested in vanpooling and expressed a desire to learn more for either current or future purposes.
- Formal detailed presentations on vanpooling were made to more than 21 major employers.
- Over 150 management/administration executives in Manitoba are well versed in the details of vanpool implementation and operation.
- Several hundred commuters have been made aware of the vanpooling alternative as a result of the feasibility studies undertaken on behalf of the employers who participated in the demonstration project.

5. ECONOMIC BENEFITS AND FUTURE POTENTIAL

The benefits to be realized from undertaking this demonstration were to have been expressed in terms of energy conserved. These benefits would have been achieved as soon as any vanpools were implemented and would continue as far into the future as the vanpools continued to exist.

Because no vanpools were formed within the time frame of the demonstration, benefits arising from having conducted the demonstration are non-pecuniary. That is, benefits achieved from the program lie in vanpooling's future potential resulting from this project's having sensitized a number of individuals and employers to the concept. When general economic conditions and employment prospects improve, the implementation of vanpools having the kind of energy conservation benefits mentioned above is much more likely.

Whether or not current economic conditions abate and employers become more willing to implement company-sponsored vanpool programs, future opportunities for vanpool formation exist. Specifically, the alternative to the promotion of vanpooling at the (destination/work) end of the journey-to-work is to market the concept at the origin (commuter/employee residence) end. Indeed, in formulating potential routes within the context of the current demonstration project, it was found that vanpools originating in uncongested, low density rural residential areas destined to an essentially

common work area (that is, relative commonality of general geographic location of work rather than, necessarily, commonality of employer) appeared to be logistically more feasible than organizing routes originating within a large metropolitan area destined to a single rural employment point. In the course of this demonstration project, research was undertaken and various enabling arrangements made to facilitate the formation of commuter-originated rather than employer-sponsored pools.

5.1 Cooperative Vanpools

One type of pool organized strictly through the initiative of commuters themselves is the cooperative vanpool. A vanpool "co-op" is much like any other cooperative whereby shareholding members incorporate as an association. Each member contributes a fixed amount to cover the initial capital costs (if any) and monthly operating costs. The cooperative behaves as a democratic business society governed by by-laws, articles and policies set by the members and acted upon by the officers they elect and managers they appoint. In Manitoba, a cooperative may be formed by three or more people making application to the Manitoba Department of Cooperative Development.

The co-operative approach is documented in the Canadian Vanpooling Guidebook as an alternative for organizing vanpools amongst commuters unrelated by a common employer. That

no (legally incorporated) vanpool co-ops are known to exist in Manitoba or Canada suggests that the means for forming them are not well known by prospective vanpoolers. Vanpooling is intended to be a simple and flexible journey-to-work alternative. It is therefore important that initial enquiries by prospective vanpooling "co-operators" be handled by knowledgeable officials capable of guiding the formation of a potential vanpool co-op successfully through its early stages. As a result of efforts made in this demonstration project, officials of the Manitoba Department of Co-operative Development are aware of vanpooling concepts and are prepared to provide assistance.

5.2 Third-Party Vanpools

The major difficulty in the formation of vanpool groups with no common sponsoring employer is the understandable reluctance of individuals to take responsibility for acquisition costs (whether buying or leasing). This obstacle is somewhat alleviated through the formation of legally incorporated cooperatives which spread any risks over the entire membership rather than burdening a single individual. Another approach proven highly effective in the United States is the "third party" concept.

A third party vanpool organization provides a pooling service to individuals in a company, a group of companies in an industrial or commercial area, or groups of commuters

living close to one another but working within a certain area (eg. an industrial park or building complex or a central business district). The services provided by such an organization vary in accordance with the needs of individual vanpool groups and can include marketing, route matching, van acquisition, insurance, maintenance arrangements, and administrative back up.

In the course of carrying out this demonstration, discussions were held with several potential third party organizations including automobile manufacturers, dealers and lessors and public transportation firms. It would appear that organizations in the best position to offer comprehensive third party vanpool services to individuals wishing to form a vanpool with no common sponsoring employer are intercity or inter-municipal passenger transportation companies.

Because of its long and extensive experience in the Manitoba (and Prairie region) passenger transportation market, one company in particular - Grey Goose Bus Lines Ltd. - seems equipped and motivated to seriously look into the possibility of offering some form of innovative third party vanpool service. Indeed this firm has undertaken much research in order to identify new markets for conventional inter-municipal motorbus service between Winnipeg and satellite communities and views the provision of a door-to-door vanpool service as a possible means to attract commuters who would not normally be interested in a conventional motorbus

service. A demonstration project showing the potential energy savings arising from third party vanpools in the Winnipeg region should have excellent transferability potential for other major Prairie centres such as Calgary and Edmonton.

5.3 Future Markets

At present, the private automobile (with some carpooling) is the chief journey-to-work mode used by the large numbers of individuals who commute to work daily in Winnipeg from over a dozen dormitory communities within a 100 km radius of Winnipeg. It is to such persons as commuting individuals rather than employees of a potential vanpool sponsor that further ride-sharing (e.g. third party vanpooling) demonstration efforts in Manitoba should be addressed.

Whether such commuters represent a significant energy conservation opportunity could be confirmed through direct market research. For example, a local media advertising blitz could be carried out for commuters living in a pre-specified suburban area 50 to 100 kilometres from Winnipeg (for example in the Beausejour/Anola/Dugald area). Following the blitz, interested commuters could express their interest in vanpooling to provincial government officials by phoning an advertized toll-free number for further information and assistance.

Should such marketing activities be undertaken, it is imperative that they be backed up by an appropriate commitment by the province of Manitoba to follow up serious enquiries. Even in the absence of a direct marketing effort, the need for an ongoing information, education and implementation assistance commitment from the province is evidenced in several vanpooling enquiries that have been addressed to the Department of Highways and Transportation in the month immediately following the official termination of this demonstration project.

6. COMMERCIAL POTENTIAL

Employer-sponsored, co-operative, and owner-operated vanpools are intended to operate on a cost recovery, non-profit basis. Therefore, with the exception of revenues/profits attributable to the sale or lease of vans, these types of vanpools do not offer great "commercial value" *per se*. Moreover, third party vanpools are normally operated by persons motivated by the possibility of earning a return on investment. This return normally is achieved by the operator through small monthly administrative fees charged to vanpoolers, but primarily consists of rebates or discounts obtained through large-scale (ie. fleet) purchases of vehicles, insurance, maintenance and fuel. In order for significant earnings to be achieved without unduly affecting fare levels, it would appear that the size of the Winnipeg

region vanpool market would accommodate only a single third party operator.

7. LEGAL ASPECTS

At present, vanpooling is not mentioned in the Manitoba Highway Traffic Act, but rather, is provided for by exemption to regulations made under the authority of the Act by the Highway Transport Board. Since May 29, 1979 vanpools have been allowed to operate pursuant to a Board order which "exempts vehicles being used in a Vanpooling Demonstration Project in the Province of Manitoba from the necessity of holding an Inter-Municipal Livery operating certificate as issued by the Board". Arrangements have been made with the Highway Transport Board to allow for the operation of employer-sponsored, cooperative, third party, or any type of vanpools, providing that such vanpools are registered with the Highway Transport Board and are in receipt of a letter advising highway inspection officials of such vanpools' authority to operate.

The Manitoba Highway Transport Board is well aware of the vanpooling concept and would most likely take appropriate measures to accommodate any group wishing to form a vanpool. However, in order to ensure that any such group comes to the attention of the Highway Traffic Board and is made aware of and responsible for conducting its operations in accordance with the rules and regulations governing highway traffic, the

incorporation of the various vanpooling concepts into the Manitoba Highway Traffic Act would be desirable. Generally speaking - with the exception of a third party operator who should be licensed as a special type of public passenger transportation operator - legislation respecting vanpools should emphasize the restriction of revenue-earning activities to the journey-to-work in order to not affect the viability of existing licensed carriers and to not jeopardize the limits of a vanpool's liability.

8. CONCLUSIONS AND RECOMMENDATIONS

In the face of difficult economic times, employers are generally reluctant to sponsor innovative energy efficient journey-to-work transportation programs for their long-distance community employees. Similarly, commuters, faced with uncertain future employment prospects, are averse in such recessionary circumstances to participate in innovative ridesharing (or, for that matter, any) activities requiring relatively long-term commitments. Nevertheless, as a result of this promotion and education program, an appreciable number of Manitoba employers and commuters are now familar with vanpooling concepts. Many of these people have expressed a positive potential future interest in vanpooling.

Despite the fact that no vanpools were implemented within the demonstration project's time horizon, the project

sensitized many people to this innovative ride-sharing concept. Therefore, at least some ongoing commitment by the Manitoba and Federal governments to assist companies and individuals wishing to become involved in vanpooling will be required when economic conditions and employment levels return to normal or improve.

In anticipation of, or preparation for, significant potential future vanpooling interest and activity, the following recommendations are submitted:

i) Appropriate amendments to Manitoba's highway transportation legislation should be made and publicized which facilitate the startup of vanpools by individuals, employers, or a third party, which clarify legal and liability implications of vanpooling, and which endeavour to ensure that vanpools operating in Manitoba do so within the preview of specifically stated regulations.

ii) Consideration should be given to a CREDA-sponsored "Third Party Vanpool" demonstration project aimed at the journey-to-work needs of workers residing outside of Winnipeg commuting to unrelated (other than by proximity) places of employment in Winnipeg, to be carried out by a firm with substantial experience in the provision of passenger transportation.

iii) A special marketing effort aimed at the widespread promotion of vanpooling among prospective vanpoolers in a selected area should be undertaken with a view to quan-

tifying the potential for vanpooling by suburban-resident workers commuting to Winnipeg and perhaps Brandon.

iv) Whether any additional promotional efforts are made, a minimum requirement on the part of the Province of Manitoba should include appropriate staff and financial resources devoted to the provision of information and implementation assistance to interested employers and commuter groups.

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APPENDIX A:

QUESTIONNAIRES USED TO SOLICIT EMPLOYER AND COMMUTER INTEREST

MANITOBA
DEPARTMENT OF HIGHWAYS AND TRANSPORTATION

Vanpooling Pre-Seminar Interest Survey

FIRM NAME:_____ DATE:_____

ADDRESS: _____ PHONE:_____

_____

POSTAL CODE: _____

ATTENTION: _____

1) Received Brochure: Yes_____ No _____ (call back date:_____)

2) Examined Brochure: Yes_____ No _____ (call back date:_____)

3) What do you think of vanpooling:

a) Positive _____ Remarks:_____

_____

_____

b) Negative: _____ Remarks: _____

_____

_____

4) Interested in attending a seminar? a) Yes ____ b) No ____

c) If no: Would you like a bit more information first?

Yes _____ No_____

d) If yes: Preferred City: Winnipeg _____ Brandon _____

Preferred Time: Morning _____ Afternoon _____

Evening _____

Preferred Day of Week: M___T___W___TH___F___S___

Preferred Week: October 11-15 _____

October 18-22 _____

October 25-29 _____

November 1-5 _____

How many people (management) would you be bringing along? _____

5) Remarks: _____

_____

_____

_____

_____

PLEASE RETURN TO: _____

VAN POOL PROGRAM QUESTIONNAIRE

1. NAME: _____
2. HOME ADDRESS: _____ CITY: _____
   POSTAL CODE: _____ PHONE NUMBER: _____
3. WORK LOCATION: _____
   NAME OF FIRM: _____
   ADDRESS: _____ OFFICE PHONE: _____

4. I normally get to work by: (Check one only)
   - _____ Driving car alone
   - _____ Driving car with passengers
   - _____ Taking turns, driving in a carpool (# of passengers ___)
   - _____ Riding in a carpool
   - _____ Being dropped off at work
   - _____ Riding the bus

5. My usual working hours are _____ to _____.
   My working hours are flexible _____ YES _____ NO
   If yes, please record variation in hours _____
   _____
   I work shift work _____ YES _____ NO
   If yes, please note various shift work times _____
   _____
   I work overtime _____ YES _____ NO

6. I need my car at work: (Check one)
   _____ NEVER _____ SELDOM _____FREQUENTLY

7. I work in the following department: _____

8. I am interested in the Vanpool Program: _____ YES _____ NO

9. I am interested in becoming:
   - _____ DRIVER
   - _____ BACK UP DRIVER
   - _____ PASSENGER
   - _____ I WOULD LIKE MORE INFORMATION

APPENDIX B

List of Firms Contacted to Participate In Educational Sessions

Winnipeg Firms

Air Canada
Boeing of Canada Ltd.
Bristol Aerospace Ltd.
Burns Meats Ltd.
CN Rail
CP Rail
Canada Packers Ltd.
Canada Safeway Ltd.
Canadian Grain Commission
Canadian Wheat Board
Cargill Grain Ltd.
Concordia Hospital
Co-op Implements
Dominion Bridge Co. Ltd.
Flyer Industries Ltd.
Freshwater Fish Marketing Corp.
Great West Life Insurance Co.
Health Sciences Centre
Manitoba Hydro
Manitoba Telephone System
Misericordia Hospital
Motor Coach Industries Ltd.
Northern Telecom Ltd.
Red River Community College
Reimer Express Lines Ltd.
St. Boniface General Hospital
Seven Oaks General Hospital
Standard Aero Ltd.
Tan-Jay International Ltd.
Transport Canada
United Grain Growers
University of Manitoba
University of Winnipeg
Victoria General Hospital
Wescott Fashions Ltd.
Westfair Foods ltd.
Winnipeg Free Press
Winnipeg, Hydro

APPENDIX B continued

Rural Firms	Location
Assiniboine Community College	Brandon
ARM Industries Inc.	Brandon
Behlen-Wickes Co. Ltd.	Brandon
Beverage Services ltd.	Brandon
Brandon Correctional Institute	Brandon
Brandon Mental Health Centre	Brandon
Brandon Sun	Brandon
Brandon University	Brandon
Canadian Steel Tank Ltd.	Brandon
Flying Dutchman Kitchens	Brandon
Inventronics	Brandon
A.E. McKenzie Co. Ltd.	Brandon
Provincial Government Offices	Brandon
Simplot Chemical	Brandon
Campbell Soup Co. Ltd.	Portage la Prairie
McCain Foods Ltd.	Portage la Prairie
Phillips Cables Ltd.	Portage la Prairie
Portage Correctional Institute	Portage la Prairie
Barkman Concrete Ltd.	Steinbach
C.P. Loewen Enterprises Ltd.	Steinbach
Lund Boats	Steinbach
Schmidtke Millwork Ltd.	Steinbach
Lodemaster	Winkler
Monarch Industries Ltd.	Winkler
Nu-Steel Industries ltd.	Winkler
Triple-E Canada Ltd.	Winkler
Manfor-Lumber Division	The Pas
Manfor-Pulp and Paper Division	The Pas
The Pas Correctional Institute	The Pas
Manitoba Rolling Mills Ltd.	Selkirk
Selkirk Mental Health Centre	Selkirk
Farm King Ltd.	Morden
Morden Fine Foods	Morden
D.W. Friesen & Sons ltd.	Altona
CSP Foods Ltd.	Altona
Midland Manufacturing	Rosenort
Westfield Industries ltd.	Rosenort
CSP Foods ltd.	Russell

APPENDIX B continued

Rural Firms	Location
Western Peat Moss Ltd.	Moss Spur
Provincial Government Offices	Dauphin
Headingly Correctional Institute	Headingly
Atomic Energy Canada Ltd.	Pinawa
Stoney Mountain Penitentiary	Stoney Mountain
South East Forest Products	Blumenort
Inco Metals Co.	Thompson
Hudson Bay Mining & Smelting Co.	Flin Flon
E. Holmgren & Sons Ltd.	Sprague
Carnation Foods	Carberry
Calvert of Canada	Gimli
Superior Bus Manufacturing Ltd.	Morris
DND CFB Shilo	Shilo

APPENDIX C

List of Firms Participating In Educational Sessions

Great West Life Assurance Co.

Manitoba Forestry Resources Ltd.

Canadian Forces Base Shilo

Motor Coach Industries Ltd.

Manitoba Telephone System

Transport Canada

CN Rail

CP Rail

Wescott Fashions

Stonewall Community Co-op Inc.

University of Manitoba

Co-op Implements

Northern Telecom

Red River Community College

Loewen Millwork

Manitoba Hydro

Canada Safeway

Health Sciences Centre

Selkirk Mental Health Centre

Simplot Chemical